State of Montana

REPORT TO THE LEGISLATURE

Sunset Review

BOARD OF RADIOLOGIC TECHNOLOGISTS

The 1977 Sunset Law terminates the Board on July 1, 1981. This review provides information to assist the Legislature in making the decision to continue or modify the Board.

This report presents seven areas for Legislative consideration (page 19) including:

- Effectiveness of board regulation of the radiologic technologist profession.
- Coordination of regulation between the board and the Department of Health and Environmental Sciences.
- Changes in board rules relative to permit examinations, standards of conduct, and board membership.

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STATE OF MONTANA

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September 1980

The Legislative Audit Committee
of the Montana State Legislature:

Herein transmitted is our sunset performance review of the Montana Board of Radiologic Technologists. The review was conducted in response to the 1977 Sunset Law, which terminates the board on July 1, 1981.

The review focused upon an examination of board operations. It does not encompass an audit of the board's financial transactions or overall compliance with state laws.

There are no formal recommendations in the report since the responsibility for such recommendations lies with the Audit Committee. Nevertheless, we discussed the contents of the report with a number of individuals and organizations, including the director of the Department of Professional and Occupational Licensing, the members of the Board of Radiologic Technologists, the president of the Montana Society of Radiologic Technologists, the Governor's Office of Budget and Program Planning, and the chief of the Occupational Health Bureau of the Department of Health and Environmental Sciences.

We wish to express our appreciation to the members of the board and to the director of the department and his staff for the assistance they provided during the review. We also wish to thank the members of the radiologic technologist profession for assistance they gave us.

Respectfully submitted,

Morris L. Brusett

Morris L. Brusett, C.P.A.
Legislative Auditor

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APPOINTIVE AND ADMINISTRATIVE OFFICIALS
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		Term Expires
Reynold J. Benedetti, R.T. Chairman	Great Falls	1981
Phil Harston, R.T.	Missoula	1983
Donna Goodman, R.T.	Billings	1982
J. Kent Boughn, M.D. Radiologist	Helena	1983
Howard N. Mazurkiewicz, M.D. Radiologist	Great Falls	1981
Allen W. Downs, D.C.	Billings	1981
Vacant		

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL LICENSING

Ed Carney	Director
Lisa Casman	Administrative Assistant

Chapter 1

BACKGROUND

This sunset performance review addresses state regulation of radiologic technologists by the Board of Radiologic Technologists - a state board within the Department of Professional and Occupational Licensing.

REPORT OBJECTIVES

The 1977 Legislature passed a law terminating numerous regulatory boards and agencies, including the Board of Radiologic Technologists. This law, commonly referred to as the "sunset law", requires the Legislative Audit Committee to conduct a performance review of each terminated agency. The performance review must objectively examine the need for each regulatory board/agency and the audit committee must offer recommendations for reestablishment or modification.

The sunset law also requires an examination of the following questions during the conduct of the committee's review:

(a) Would the absence of regulation significantly harm or endanger the public's health, safety, or welfare?

(b) Is there a reasonable relationship between the exercise of the state's police power and the protection of the public's health, safety, or welfare?

(c) Is there another less restrictive method of regulation available which could adequately protect the public?

(d) Does the regulation have the effect of directly or indirectly increasing the costs of any goods or services involved and, if so, to what degree?

(e) Is the increase in cost more harmful to the public than the harm which could result from the absence of regulation?

(f) Are all facets of the regulatory process designed solely for the purpose of, and have as their primary effect, the protection of the public?

Using the information contained in this report, and that gathered during a public hearing, the committee will address these six questions. During the hearing process, testimony and comments will be heard from the board/agency, the profession, and interested members of the public.

In defining legislative intent, the sunset law (section 2-8-101(2), MCA) states that, by requiring periodic evaluation in the form of a performance review, the legislature will be in a better position to ensure that agencies and programs exist only to be responsive to state residents' needs. The sunset law terminates the Board of Radiologic Technologists on July 1, 1981.

RADIOLOGIC TECHNOLOGIST PROFESSION

Radiologic technology involves the use of radiant energy in the field of medicine to assist the physician and other medical practitioners in the diagnosis and treatment of abnormal physiological conditions. In Montana, three separate board authorizations allow

individuals to practice radiologic technology: the radiologic technologist license, the permit, or the temporary permit.

The licensed radiologic technologist performs the duties of operating x-ray and fluoroscopic equipment under the direction of a licensed medical practitioner. Licensed technologists "expose" x-ray film for the diagnosis of fractures, diseases, and other injuries. In addition, they may develop and process the films. The preparation and positioning of patients for x-ray examination or treatment is another licensee duty. In connection with the processing of the film, the licensee prepares solutions and inspects, maintains, and makes minor repairs to x-ray equipment. As of May 21, 1980, there were 436 individuals licensed as radiologic technologists.

Individuals who are not licensed may obtain permits to operate x-ray equipment, develop and process films, and prepare and position patients. The permittees may apply x-ray radiation to persons only in those areas where they are specifically qualified (i.e., skull, spine, chest, etc.). Depending on the individual, some permittees may qualify to apply x-rays to all areas of the patient regularly examined by licensees. There were approximately 100 individuals holding permits in fiscal year 1979-80.

Temporary permits are issued to certain individuals. These persons are also restricted to applying x-rays to those parts of the human anatomy where they have demonstrated complete capability. These permittees are granted temporary status because of regional hardship or emergency condition or because the individuals have met all requirements for licensure except passage of the examination. The latter type of temporary permit expires 15 days after the examination. There were 23 temporary permits issued in fiscal year 1979-80.

X-RAY EQUIPMENT IN MONTANA

There are approximately 1,650 x-ray machines and fluoroscopes in use in the state of Montana. The type of facility or individual using this equipment, and the number of each, as of November 1979, are as follows:

Dentists	789	(48%)
Hospitals	371	(23%)
Physicians	217	(13%)
Veterinarians	107	(7%)
Chiropractors	90	(5%)
Podiatrists	13	(.8%)
Osteopaths	3	(.2%)
Other Uses*	55	(3%)

*Other uses relates to industrial radiology, x-ray defraction, and fluoroscopes.

Source: Department of Health and Environmental Sciences Records.

Illustration 1

Chapter II

BOARD OF RADIOLOGIC TECHNOLOGISTS

INTRODUCTION

An act to initiate the regulation of the practice of radiologic technology was passed by the Montana Legislature in 1975, and the Board of Radiologic Technologists was created to carry out the purposes and enforce the provisions of the act. Regulation by the board includes the examination and licensure of applicants, the issuing of qualifying permits, and the revocation or suspension of licenses and permits.

BOARD OPERATIONS

Structure

The board consists of seven members appointed by the governor. Three members must be licensed physicians. Two of three physicians are required to be radiologists (specialists in the use of radiant energy). Another member must be a licensed chiropractor. The remaining three members are licensed radiologic technologists registered with the American Registry of Radiologic Technologists (ARRT). Each member serves a term of three years.

For each day engaged in official board business, board members receive $25 per day and travel expenses as provided by law. The board is required to meet at least twice a year. During calendar year 1979 the board met three times.

Staffing and Funding

The board is administratively attached to the Department of Professional and Occupational Licensing. The department provides .16 full-time employees to perform the record keeping, reporting, and related administrative and clerical functions of the board.

Board functions are supported by examination, licensing, and permit fees collected by the department and deposited in the earmarked revenue fund. All fee amounts are set by the board. Initial license, permit, and examination fees are not to exceed a $50 statutory maximum. The current fees charged by the board are shown in Illustration 2.

FEE SCHEDULE

Examination Fee	$10
Certificate Fee	$15
License Fee (two years)	$20
License Fee (one year)	$10
License Renewal Fee	$20
Initial Permit	$10
Permit Renewal	$10
Temporary (emergency) Permit	$10
License List per copy	$ 5
Duplicate License or Permit	$ 2

Source: Compiled by the Office of the Legislative Auditor from board records.

Illustration 2

The following illustration represents board revenue, expenditures and fund balances for the past five fiscal years. The variable revenue amounts are attributable to biennial renewal.

BOARD FINANCIAL HISTORY

Fiscal Year	Revenue	Expenditures	Fund Balance
1979-80	$ 3,300	$6,328	$6,436
1978-79	11,100	7,449	9,464
1977-78	3,605	4,344	5,813
1976-77	13,020	6,528	6,552
1975-76	60	0	60

Source: Compiled by the Office of the Legislative Auditor

Illustration 3

BOARD GOALS AND OBJECTIVES

Prior to a sunset review by the Legislative Audit Committee, the board must delineate the goals and objectives of programs for which it is responsible.

The board reported its goal to be "To carry out the intent of the law to assure the public of safety and professionalism of those licensed to administer x-ray radiation." The reported board objectives are as follows:

--To assure all x-rays are administered by qualified, competent and experienced persons.

--To rewrite the present examination or participate in a national testing service examination program.

--To continue working with the Department of Health and Environmental Sciences on inspection for licensing compliance of x-ray personnel.

--To enforce the statutes affecting licensure of radiologic technologists.

--To help fund x-ray training programs to upgrade the personnel taking x-rays; particularly those who have not completed a 24-month course in radiologic technology.

--To make all x-ray locations aware of the licensing laws and to make them aware of the dangers of x-ray radiation.

BOARD LICENSING

For all licenses and permits granted by the board, applicants must meet specific qualifications. The following requirements are necessary for a license, permit, and temporary permit.

License:

--Satisfactorily complete a 24-month course of study in radiologic technology approved by the board.

--Be of good moral character.

--Be at least 18 years of age.

--Not be addicted to intemperate use of alcohol or narcotic drugs.

--Pass an examination approved by the board.

Permit:

--Show proof of employment by a physician or administrator.

--Complete a minimum of 24 hours of formal classroom x-ray training under the direction of a radiologic technologist or radiologist.

--Show proof of a minimum of 6 months practical experience.

--Pass a permit examination approved by the board.

Temporary License Permit: (Prior to licensure exam)

--Satisfactorily complete a 24-month course of study in radiologic technology approved by the board.

--Be of good moral character.

--Be at least 18 years of age.

--Not be addicted to intemperate use of alcohol or narcotic drugs.

Temporary Permit: (Hardship or Emergency)

--Provide adequate evidence of regional hardship or emergency condition.

--Provide adequate evidence of capability of performing x-ray examinations without endangering the public.

Licenses may also be obtained by endorsement. The board may accept in lieu of examination a certificate of the American Registry of Radiologic Technologists (ARRT) or a certificate, registration, or license issued by another state whose qualifications are at least equal to Montana's. An individual becomes certified by the ARRT by completing 24 months of education and passing an ARRT approved examination.

Illustration 4 details the number of licensed radiologic technologists and permit holders in Montana as of December 31 of each year. Included in the illustration are those licenses obtained by endorsement.

LICENSING STATISTICS

	Licenses		Permits		Temporary Permits
Year	New	Renewed*	New	Renewed	New
1979	53	0	26	68	19
1978	90	398	44	21	19
1977	353	0	59	0	122

*Two year renewal.

Source: Compiled by the Office of the Legislative Auditor from board records.

Illustration 4

Renewal of licenses is a biennial process. Licenses expire on December 31 of the first even-numbered year following the year of their issuance and on every

even-numbered year thereafter. Permits are valid for a period not to exceed twelve months, and the board requires permit renewal by December 31 of each year. Temporary permits granted because of hardship or emergency are valid for up to one year and may be renewed by reestablishing, to the board's satisfaction, evidence of continued regional hardship or emergency conditions.

EXAMINATIONS

There are separate examinations for the license and for the permit. Both examinations consist of written tests; the licensing examination is administered by ARRT and the permit examinations are formulated by the board. The examinations cover basic radiation, darkroom procedure, anatomy, physiology, radiation protection, and health and safety of the patient.

License Examination

The board has adopted as its current examination for licensure, the examination offered by the ARRT. The board provides applicants for licensure the opportunity for examination at least every six months. During 1979, the examination was offered twice (May and November). However, since most licenses are issued through ARRT endorsement, which also requires passage of the ARRT examination, statistics on the number of individuals taking and passing the Montana exam would

be misleading. Board records indicate that only one individual took the licensing exam in 1979, yet 53 new licenses were issued. Most of these licenses were granted because applicants were ARRT certified, which indicates they had passed the ARRT examination at one time. Unsuccessful examinees would not have applied for licensure. Therefore, meaningful examination statistics cannot be compiled.

All applicants who submitted their requests for licensure prior to March 1, 1977 qualified without examination under a "grandfather clause."

Permit Examinations

Permit examinations are generally offered twice each year (May and November) and are available in the board office by appointment. Board members will also give permit examinations in their home towns at various times.

The permit examination is a composite of six separate examinations. The individual examinations test applicants in the areas of general x-ray knowledge, chest, extremities, spine and neck, skull, and other areas (i.e. Fluoro). Successful passage of the general knowledge examination and one or more of the other examinations allows individuals to practice in those areas where they have specifically qualified.

The board grants full diagnostic permit status to those individuals passing all six separate permit examinations.

Complete permit examination statistics could not be accurately reconstructed due to incomplete board records. The following presents a summarization of available examination statistics between May 1978 and June 1980.

PERMIT EXAMINATIONS

Type	Taken	Passed	Percentage
General	94	70	74%
Chest	85	64	75%
Extremities	88	54	61%
Spine	81	33	41%
Skull	77	24	31%
Other (Fluoro)	38	29	76%

Source: Compiled from Department records.

Illustration 5

DISCIPLINARY ACTIONS

A license or permit may be suspended for a fixed period or may be revoked. The technologist may be censured, reprimanded, or otherwise disciplined if, after a hearing before the board, it is determined the technologist is:

(a) guilty of fraud or deceit in activities as a technologist or in procuring the license.

(b) has been convicted of a crime involving moral turpitude.

(c) a habitual drunkard or is addicted to the use of drugs, or is not mentally competent.

(d) guilty of unethical conduct, as defined by the board.

(e) guilty of incompetence or negligence in the activites as a radiologic technologist.

(f) performing as a technologist without a license or license renewal.

Anyone wishing to enter a complaint against a radiologic technologist must file a complaint form with the board. Anyone having a complaint against any unlicensed person may file a complaint with the board or the local county attorney.

Since the initiation of the licensing law, there has been one complaint filed with the board. The complaint involved an individual who was giving x-ray examinations without being properly qualified. The board required the individual to obtain a permit. The individual passed the examination and received the necessary permit. There have been no revocations or suspensions.

INSPECTIONS

The board also has statutory authority to conduct inspections to determine compliance with the licensing act. The board has never conducted a formal inspection. The board has a cooperative inspection agreement with the Montana Department of Health and Environmental Sciences (HES) through the Occupational Health Bureau and Hospital and Medical Facilities Division. HES has the authority to inspect x-ray operators for compliance under section 37-14-322, MCA, of the radiologic technologist licensing law. The agreement requires HES

to report to the board any irregularities concerning radiologic technologists that it may find while inspecting x-ray machinery and facilities. A review of board records indicated that in 180 facilities visited by HES investigators 26 individuals were operating x-ray equipment without a license or some form of permit between March 8, 1978 and June 27, 1980.

EXEMPTIONS TO REGULATION

According to section 37-14-301, MCA, nothing in the licensing law is intended to limit or affect in any respect the practices of a person licensed to practice medicine, dentistry, dental hygiene, podiatry, chiropody, osteopathy or chiropractic. For example, any licensed person administering an x-ray examination in relation to the practice of dentistry is excluded from regulation by the board. This includes dentists, dental hygienists and dental assistants.

The final exemption applies to a student enrolling in or attending a school or college of medicine, osteopathy, chiropody, podiatry, dentistry, dental hygiene, chiropractic, or radiologic technology who is under the direct supervision of a person licensed to prescribe such examinations or treatments.

Chapter III

OTHER REGULATION

FEDERAL AND STATE REGULATION

In Montana, the only state agency with specific regulatory powers over technologists is the Board of Radiologic Technologists. However, there are federal and state regulations which apply to the use of x-ray equipment. Federal regulations establish the equipment performance standards that must be met for all ionizing radiation-omitting products. The state of Montana, through the Occupational Health Bureau of the Department of Health and Environmental Sciences (HES), has established extensive rules and regulations relating to x-ray installations and equipment.

All x-ray equipment must be registered with HES. HES regulations require that the registrant (i.e., doctor, dentist) be responsible for assuring that radiation sources under his jurisdiction are used only by persons competent to use them. The registrant is responsible for providing personnel with instruction on safe operating procedures and proper radiation protection practices. A radiation officer, who is appointed by the registrant for each x-ray installation, is responsible for conducting radiation leak tests, checking safety equipment, and investigating any abnormal or excessive exposures. No registrant is to operate x-ray equipment unless the equipment and installation meet the requirements of HES rules.

For each type of installation (i.e., dental, veterinary, therapeutic) HES has established specifications for the equipment's structure, beam size, shielding, areas of radiation, and operational parts. General operating procedures are specified to provide protection for the operator and patient. These procedures relate to maximum exposure, use of protective aprons, the exclusion of all unnecessary personnel from the installation, and special precautions to minimize exposure to the patient and operator. HES determines if registrants are complying with required procedures and standards through on-site inspections.

During 1978 and 1979 HES inspected 725 x-ray tubes. An attempt is made to inspect each piece of x-ray equipment once every three years. More frequent inspections are planned for hospital equipment, fluoroscopes and high-use clinical equipment. In 1969, HES noted that 75% of the inspected medical x-ray equipment did not meet minimum standards. In 1970, approximately 45% of inspected equipment did not meet minimum standards. Inspection figures for 1978 and 1979 show that 4% of the equipment did not meet the standards at the time of inspection. According to HES officials, these figures are expected to stay at 4 to 5% because they represent the normal rate of wear for x-ray machinery.

SELF-REGULATION

Professional societies and other radiologic organizations have a certain degree of self-regulatory power over their memberships. Presently, 340 Montana radiologic technologists (approximately 75% of the licensees) are members of the American Registry of Radiologic Technologists (ARRT) and approximately 200 are members of the Montana Society of Radiologic Technologists. The societies set standards of conduct, establish continuing education programs and provide input for state licensing boards and federal regulations. The ARRT's certificate is accepted by the board in lieu of its own examination for licensure by endorsement.

OTHER STATE REGULATION

At present, radiologic technologists are licensed in 12 states. The form of regulation is similar in each case and in most cases the regulations are administered by a single board similar to the Montana Board of Radiologic Technologists.

In a review of the intermountain states of Wyoming, Utah, Colorado, Idaho, Oregon, and Washington, we found that Oregon was the only state licensing individuals administering x-ray examinations. All the other intermountain states require only registration of ionizing radiation sources, the actual x-ray machines, through their Health Departments. None of the other states required registration of the operators of x-ray

equipment. The following table compares various facets of Montana's regulations to those of other states licensing technologists:

REGULATIONS OF OTHER STATES COMPARED TO MONTANA'S

Entity	United States	Montana
Licensing Entity	10 Boards 2 Department of Health	Board of Radiologic Technologists
Board Size	2 No board members - administered by department 7 Boards - 5-7 members 3 Boards - 8-10 members	7 members
Housed Within What Agency	2 Independent or Department of Licensing 8 Department of Health 1 Human Services Agency 1 State Atomic Energy Commission	Department of Professional and Occupational Licensing
Board Makeup	0 Boards - Technologists only 6 Boards - Majority of board technologists 4 Boards - Minority of board technologists	3 of 7 members technologists
Examination	8 Written 1 Written and oral 1 Written and practical 2 Written, practical and oral	Written
Public Membership	5 Boards - Public members	No
Continuing Education	5 States - required 7 States - none	None
Renewal	4 States - Annual 8 States - Biennial	Biennial

Source: Compiled by the Office of the Legislative Auditor.

Illustration 6

Chapter IV

AREAS FOR LEGISLATIVE CONSIDERATION

The design and effectiveness of certain aspects of the regulatory process may warrant legislative consideration. The intent of the following sections is to briefly discuss these aspects as they apply to the Board of Radiologic Technologists.

The areas of consideration are:

1. Effectiveness of Regulation
   --Temporary Permits
   --Permittees and Licensees
   --Board Control of Permittee Training
   --Exemptions
2. Coordination of Regulation
3. Permit Examinations
4. Standards of Conduct
5. Board Membership
6. Administrative Functions
7. Other Areas of Consideration

EFFECTIVENESS OF REGULATION

It is the intent of the state of Montana to protect the public from the harm that could occur from improper application of x-ray radiation. Regulation by the state extends to x-ray machinery and to those operating the equipment. For x-ray equipment and procedures, the Department of Health and Environmental Sciences (HES) is to "... provide a program of effective regulation of sources of ionizing radiation

for the protection of the occupational and public health and safety ..." (Section 75-3-102(1), MCA). The legislature also declared " ...that the practice of radiologic technology affects the public health, safety, and welfare and that it is therefore necessary to regulate and control such practice in the public interest." (Section 37-14-101, MCA.) The following is a discussion of the extent and effectiveness of the regulation of radiologic technology and the administration of regulation by the board.

Temporary Permits

Current statutes, section 37-14-306(3), MCA, state that temporary permits may be issued by the board to unlicensed persons or to those not holding full permits when these applicants provide evidence to the board that a temporary permit is necessary because of regional hardship or emergency condition and that the applicant is capable of performing x-ray examinations without endangering public health and safety.

In reviewing board records, we noted instances where persons failing the permit examinations have obtained a temporary permit to work until the next scheduled examination. This was done by applying to the board under the emergency or hardship clause. For example, the board minutes of December, 1977 show that after an examination the secretary was "instructed to inform failures they can have a temporary permit until

the next examination to help prepare to pass the next examination." No documentation of hardship or emergency was required to obtain the temporary permit, such as a signed notice from a doctor or a description of the condition or hardship. It appears that procurement of a temporary permit depended only upon individual application rather than documented expertise. The board indicated that recent temporary permit applicants have been individually screened and proof of hardship or emergency is now required.

While the temporary permit is designed to aid health facilities without a licensee or a permit holder to maintain x-ray services, two concerns need to be addressed. The concerns are: "Should individuals be granted temporary permits after failing an examination which is intended to test their ability to perform adequate x-ray examinations or should individuals who have not demonstrated any ability be granted permission to practice just because of regional hardship?" If the stated purpose of the licensing law "to protect the public from the . . . unqualified practice of radiologic technology," is to be strictly adhered to, then consideration should be given to eliminating the temporary permit.

Permittees and Licensees

Permits are granted to individuals to administer x-ray examinations in the following areas: full diag-

nostic, chest, spine, skull, extremities, and other (Fluoro). The present statutory definition of permit (section 37-14-102(5), MCA) states that permits are "granted by the board to apply x-ray radiation to persons when the applicant's qualifications do not meet standards required for the issuance of a license." Once an individual receives permits for all diagnostic areas (i.e. skull, spine, chest, etc.) the permit holder performs the same functions as a licensee without restriction, thus blurring the distinction between permittees and fully licensed practitioners. In effect, this allows permittees to perform virtually the same duties as a licensee without having to "meet the standards" or acquire the extended training required of a licensee. Permit holders are required to have six months practical experience and complete a 24 hour course in x-ray application. Licensees must complete a 24-month course. To require two distinct ranges of training and education to perform the same function is inconsistent.

Board Control of Permittee Training

Current board control of instructors offering 24-hour courses to permittees and board verification of the validity of these courses could improve. A review of board files did not indicate a list of instructors or a list of approved courses. Not all 24-hour course

graduates are provided evidence of successful completion or attendance. Thus, the board has no means of determining if applicants for the permit have successfully completed formal classroom x-ray training under the direction of a radiologic technologist or radiologist prior to taking the examination for permit.

It should be the board's responsibility to determine that all approved instructors and courses are listed and filed with the board secretary and that all students are provided certificates of satisfactory completion and performance by areas of course work. Without proper control of these areas, the board cannot be assured that all permittees are fully qualified to administer x-ray examinations.

Exemptions

The licensing law (section 37-14-301, MCA) states that doctors, dentists, dental hygienists, chiropractors, and other practitioners of the healing arts, are exempt from the license requirement and regulation by the board. It also states that any person administering x-ray examinations related to the practice of dentistry is exempt from regulation. This includes dental assistants who are not licensed by the state.

The education received by many dental assistants does not necessarily insure proper instruction regarding the full range of dental x-ray equipment operation. Health Department officials acknowledged that a number

of practitioners, both dental assistants and other health professionals, do not know the actual dangers or proper procedures to use in exposing patients to x-rays. Thus, potentially unknowledgeable individuals may perform x-ray work resulting in harm to themselves and to persons being examined.

The fact that a majority of the x-ray machines used on human patients (789 out of 1500) are in dental offices and that all dental personnel are exempt from regulation implies that a review of the state's overall effectiveness in protecting the public from improper dental x-ray application should be considered. If it is necessary to examine and license the technologists who operate x-ray machinery, then all types of practitioners using x-ray equipment including dental assistants should be subjected to some form of qualifying procedure to ensure that they are capable of safely operating and maintaining x-ray equipment.

COORDINATION OF REGULATION

In the previous sections the role of the board in regulating the practice of radiologic technology was examined. The sections also referred to the role of HES. Both entities are involved in protecting the public from improper application of x-ray radiation.

The Montana Nuclear Regulation Act (75-3-102(2), MCA) states that the purpose of the act is "to provide a program to promote an orderly regulatory pattern

within the state . . . with respect to use and regulation of sources of ionizing radiation."

In Chapter III we note that all x-ray equipment must be registered with HES. The registrant (i.e., doctor, dentist) is responsible for assuring that radiation sources under his jurisdiction are used only by persons competent to use them. The registrant is responsible for providing personnel with instruction on safe operating procedures and proper radiation protection practices. No registrant is to operate x-ray equipment unless the equipment and installation meet the requirements of HES rules. HES determines if the registrants are complying with required procedures and standards through on-site inspections. We also noted HES checks for the license or permit of the operator of the equipment.

Since eight of the twelve states licensing radiologic technologists do so through their Departments of Health, and since the Department of Health and Environmental Sciences in Montana is responsible for the enforcement of the state's Nuclear Regulation Act, consideration could be given to allowing the department to assume all regulation of radiologic technology. This would coordinate the regulation of the equipment and the operating personnel through one department.

PERMIT EXAMINATIONS

A review of board files indicated that individuals were allowed to take the same permit examination twice on the same day or following day after having failed on the first attempt. Present board rules do not require a waiting period for examinees between attempts to pass permit examinations. If the examinations are designed to truly test the individual's knowledge of the permit area, the board should not allow immediate, repeat attempts to pass the examinations. The board has acknowledged this problem and will submit rule changes to include a 5-day waiting period between attempts to pass the permit examinations.

STANDARDS OF CONDUCT

Current law (section 37-14-321(4), MCA) states that a license or permit may be suspended or revoked if the radiologic technologist is guilty of unethical conduct as defined by the rules of the board, or is guilty of incompetence or negligence. The board has not established standards to evaluate radiologic technologist conduct or competence.

A standard of conduct is essential to any profession. Without a standard on which to base performance, regulatory entities have little means of determining what is unprofessional conduct and what form of penalty to impose. A recent Idaho Supreme Court decision has raised some doubt regarding the authority of nursing

boards to take disciplinary action against a licensee when the action is based solely on the boards' determination of what is unprofessional conduct. The standards adopted by the board could be included in the established rules of the board within the Administrative Rules of Montana (ARM).

BOARD MEMBERSHIP

Public Membership and Size of the Board

Even though the board is to be composed of seven members: two licensed radiologists, one physician, one chiropractor, and three radiologic technologists, the board operated with 5 members from October 1979 to August 1980. There are now six members on the board. There is no public member. Board members have indicated that they support the appointment of a public member. Also, the Legislative Audit Committee has recommended that at least one public member be appointed to all regulatory boards.

Board Appointments

Montana's law requires that the three radiologic technologist members of the board be registered with the American Registry of Radiologic Technologists (ARRT). Approximately 75% of the licensees in Montana are members of the Registry.

The restriction of the Governor's authority to select board members by requiring selection from specified organizations or associations has been ques-

tioned by the Legislative Audit Committee. The committee has taken the position that appointments to the board should not be restricted to members of certain groups, but should be permitted to come from all licensees.

Senate Confirmation

Gubernatorial appointments to the board are not subject to Senate confirmation. The Senate confirms the appointments to some of the state's boards and commissions. The Legislative Audit Committee has taken the position that appointments to regulatory boards should be subject to Senate confirmation.

ADMINISTRATIVE FUNCTIONS

As a result of various sunset reviews of boards within the Department of Professional and Occupational Licensing, two separate administrative areas have consistently been identified. These areas are:

--Reporting requirements of boards.

--Automated license records.

Since individual documents addressed to the department will be formulated concerning these administrative areas, a limited discussion of each is presented.

Reporting Requirements of Boards

Montana currently has a reporting requirement, (section 2-7-102, MCA), which requires all state governmental agencies to submit biennial reports to the Governor. However, these reports when published con-

tain very limited information. A report containing more specific information (i.e., number of applicants and examinations, pass-fail rate, receipts and expenditures, goals and objectives, complaints, disposition of complaints) would increase the usefulness of the report and allow the legislature to more easily monitor a board's activity.

Automated License Records

At the present time, most licensee records are kept manually by the boards within the department. In addition, new and renewed licenses are manually typed by administrative secretaries. An alternative is to automate license records through a department-wide system. The automated system could print renewal notices and also licenses. In addition, such automated records could be used to generate statistical reports on the licensee populations. Additions, deletions, and corrections to the licensee files could also be made easily.

OTHER AREAS OF CONSIDERATION

In previous reviews of regulatory boards in Montana, the aspect of uniformity among boards in reimbursement of board members and setting licensing fees commensurate with the cost of regulation were often discussed. These issues were not addressed in this review since the Board of Radiologic Technologists members are reimbursed similar to other regulatory

boards and the board has the authority to set fees between statutory minimums and maximums based upon cost. In addition, the Legislative Audit Committee has addressed these issues for all boards and has recommended that boards be allowed to set all fees commensurate with cost and that all board members be reimbursed similarly.